

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
18 August 2005 (18.08.2005)

PCT

(10) International Publication Number
WO 2005/075171 A1

(51) International Patent Classification⁷: B29C 43/52,
43/42, 43/04 // 43/08, 43/34

(21) International Application Number:
PCT/IB2005/000238

(22) International Filing Date: 31 January 2005 (31.01.2005)

(25) Filing Language: Italian

(26) Publication Language: English

(30) Priority Data:
RE2004A000009 4 February 2004 (04.02.2004) IT

(71) Applicant (for all designated States except US): SACMI
COOPERATIVA MECCANICI IMOLA SOCIETA'
COOPERATIVA [IT/IT]; 17/A, Via Selice Provinciale,
I-40026 Imola (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): PARRINELLO,

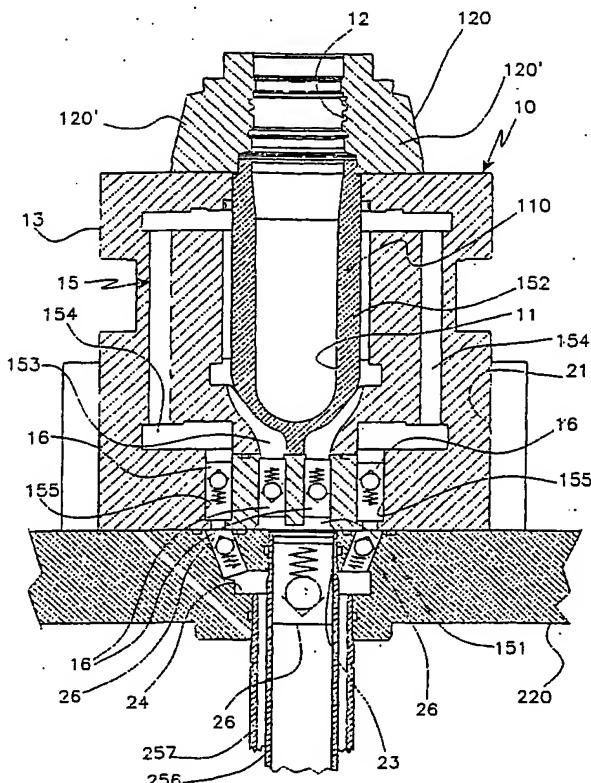
Fiorenzo [IT/IT]; 122/A, Via Zanardi, I-40059 Medicina
(IT). ZUFFA, Zeno [IT/IT]; Via Raggi, 6, I-40021 Borgo
Tossignano (IT). BALBONI, Alessandro [IT/IT]; Via
Budapest, 10, I-40057 Granarolo Dell'Emilia (IT). BEL-
TRANDI, Dario [IT/IT]; Via Gherardi, 10, I-40026 Imola
(IT).

(74) Agents: CORRADINI, Corrado et al.; Via Dante
Alighieri, 4, I-42100 Reggio Emilia (IT).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

[Continued on next page]

(54) Title: APPARATUS FOR COMPRESSION MOULDING PLASTIC ARTICLES



(57) Abstract: The plant comprises a plurality of shuttles (10) each carrying at least one die part (110), the shuttles being conveyed in a moulding apparatus (20) which is provided with a plurality of punches and a corresponding plurality of seats (21) for holding the shuttles (10), the seats arranged to receive and release the shuttles (10), the moulding apparatus comprising means for inserting the punches into the die cavities (11, 12) of the shuttle and means for withdrawing the punches to achieve a compression moulding cycle for the article. The shuttles (10) are independent of the moulding apparatus. Each shuttle (10) comprises at least one circuit (15) for at least one conditioning fluid for controlling the temperature of the article located in the die, the moulding apparatus (20) comprising at least one feed system (25) for at least one conditioning fluid to feed the conditioning fluid to the shuttles (10) inserted in the seats (21) of the moulding apparatus (20).

WO 2005/075171 A1



(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM,

PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Published:

- with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.